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WEED ABSTRACTS

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UNDER THE DIRECTION OF J.D. FRYER

The journal is published monthly by the Commonwealth Agricultural Bureaux as one of a series of abstract journals covering the major branches of agricultural science.

The object of *Weed Abstracts* is to provide factual summaries and reports of the world scientific and technical literature on weeds, weed control and allied subjects as a means of enabling readers to keep abreast of current developments and to act as a concise source of reference.

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Abbreviations

abs.	abstract	in	inch	pp.	pages
a.e.	acid equivalent	in^2	square inch	p.p.m.	parts per million
a.i.	active ingredient	IR	infra-red	p.p.m.v.	parts per million by volume
b.p.	boiling point	kcal	kilocalorie	p.p.m.w.	parts per million by weight
bu	bushel	kg	kilogramme	pre-em.	pre-emergence
°C	degrees Celsius (formerly Centigrade)	LC_{50}	median lethal concentration (median tolerance limit or TL_m)	p.t.o.	power take off
conc.	concentrated	LD_{50}	median lethal dose	pt	pint
concn.	concentration	lb	pound	ref.	references
cv.	cultivar(s)	lbf/in^2	pounds-force per square inch	RH	relative humidity
cwt	hundredweight	M	molar concentration	s	second
d.b.h.	diameter at breast height	m	metre	sp.	species
diam.	diameter	m-	milli-(x 10^{-3})	spp.	species (plural)
DM	dry matter	μ-	micro (x 10^{-6})	ssp.	subspecies
dz	Doppelzentner (= 100 kg	μm	micron	t	tonne (Mg)
e.c.	emulsifiable concentrate	m^2	square metre	temp.	temperature
°F	degrees Fahrenheit	m.c.	moisture content	TLC	thin-layer chromatography
ft	foot	mg	milligramme	u.l.v.	ultra low volume
ft^2	square foot	min	minute	UV	ultra-violet
g	gramme	ml	millilitre	var.	*varietas*
gal	gallon	mm	millimetre	vol.	volume
GLC	gas-liquid chromatography	m.p.	melting point	wt	weight
h	hour	N	normal concentration	w.p.	wettable powder
ha	hectare	n	nano-(x 10^{-9})	yd	yard
hkg	hectokilogramme	OM	organic matter	>	more than
hp	horsepower	oz	ounce	<	less than
		p.	page	±	with or without
		post-em.	post-emergence	%	percent(age)

Languages

An initial capital denotes the language of the paper, an initial small letter the language of the summary

Af	Afrikaans	Fi	Finnish	It	Italian	Ru	Russian
Bg	Bulgarian	Nl	Flemish	Ja	Japanese	Sh	Serbo-Croat
Cs	Czech	Fr	French	No	Norwegian	Sk	Slovak
Da	Danish	De	German	Pl	Polish	Es	Spanish
Nl	Dutch	He	Hebrew	Pt	Portuguese	Sv	Swedish
En	English	Hu	Hungarian	Ro	Romanian	Tr	Turkish

Abstract Numeration A sequence of abstracts sharing a common bibliographical description, e.g. each of a series of items drawn from the annual report of a research station, is indicated by placing the serial numbers of all items other than the first (that containing the bibliographical details common to all) within square brackets.

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Use of 'a.i.', 'a.e.' etc. Unless otherwise stated, rates of application for growth-regulator herbicides such as 2,4-D, MCPA, fenoprop, dalapon, the benzoics, etc. are given as the acid equivalent. Rates for other herbicides such as the ureas, carbamates, triazines, etc. are given as the active ingredient. Rates for the bipyridyls refer to the cation, only.

List of common names and abbreviations employed for currently used herbicides and plant growth regulators in *Weed Abstracts*

An asterisk (*) signifies approval by the British Standards Institution (BSI)
A dagger (†) signifies approval by the Weed Science Society of America (WSSA) or ANSI
A double dagger (‡) signifies approval by the International Organization for Standardization (I.S.O.)
Where the name approved by the WSSA or the I.S.O. differs from that approved by the BSI, the WSSA or I.S.O. name is given in brackets opposite the chemical name, with the appropriate symbol attached.

acifluorfen*†	5-(2-chloro-4-trifluoromethylphenoxy)-2-nitrobenzoic acid	
acrolein	acrylaldehyde	
alachlor*†‡	*a*-chloro-2,6-diethyl-*N*-(methoxymethyl)acetanilide	
allidochlor*‡	*N,N*-diallylchloroacetamide	(CDAA†)
ametryne*	4-ethylamino-6-isopropylamino-2-methylthio-1,3,5-triazine	(ametryn†)
aminotriazole	3-amino-1,2,4-triazole	(amitrole†‡)
amiprofos-methyl*	*O*-methyl *O*-(4-methyl-2-nitrophenyl) *N*-isopropylphosphoramidothionate	
AMS†	ammonium sulphamate	
ancymidol*‡	α-cyclopropyl-4-methoxy-α-pyrimidin-5-ylbenzylalcohol	
asulam*†‡	methyl (4-aminobenzenesulphonyl)carbamate	
atraton *†‡	4-ethylamino-6-isopropylamino-2-methoxy-1,3,5-triazine	
atrazine*†‡	2-chloro-4-ethylamino-6-isopropylamino-1,3,5-triazine	
aziprotryne*‡	2-azido-4-isopropylamino-6-methylthio-1,3,5-triazine	
barban*†‡	4-chlorobut-2-ynyl *N*-(3-chlorophenyl)carbamate	
benazolin *‡	4-chloro-2-oxobenzothiazolin-3-ylacetic acid	
benfluralin *‡	*N*-butyl-*N*-ethyl-2,6-dinitro-4-trifluoromethylaniline	(benefin†)
bensulide*†‡	*N*-[2-(*O,O*-di-isopropyldithiophosphoryl)ethyl] benzene sulphonamide	
bentazone*‡	3-isopropyl-2,1,3-benzothiadiazin-4-one 2,2-dioxide	(bentazon†)
benzadox*†	benzamido-oxyacetic acid	
benzoylprop-ethyl*	ethyl *N*-benzoyl-*N*-(3,4-dichlorophenyl)-2-aminopropionate	(benzoylprop† [acid])
benzthiazuron*‡	*N*-(benzothiazol-2-yl)-*N*-methylurea	
bifenox†	methyl 5-(2,4-dichlorophenoxy)-2-nitrobenzoate	
bromacil*†‡	5-bromo-6-methyl-3-(1-methyl-n-propyl) uracil	
bromofenoxim*‡	3,5-dibromo-4-hydroxybenzaldehyde 2,4-dinitrophenyloxime	
bromoxynil*†‡	3,5-dibromo-4-hydroxybenzonitrile	
butachlor*†	*N*-(butoxymethyl)-α-chloro-2,6-diethylacetanilide	
butam†	*N*-benzyl-*N*-isopropyl-2,2-dimethylpropionamide	
butamifos*	*O*-ethyl *O*-(5-methyl-2-nitrophenyl) *N*-s-butylphosphoramidothionate	
buthidazole*†	4-hydroxy-1-methyl-3-(2-t-butyl-1,3,4-thiadiazol-5-yl)imidazolidin-2-one	
buthiuron*	*N'*-(5-butylsulphonyl-1,3,4-thiadiazol-2-yl)-*N,N'*-dimethylurea	
butralin*†	*N*-s-butyl-4-t-butyl-2,6-dinitroaniline	
buturon*†‡	*N'*-(4-chlorophenyl)-*N*-(1-methylprop-2-ynyl)-*N*-methylurea	
butylate*†‡	*S*-ethyl *N,N*-di-isobutyl(thiocarbamate)	
cambendichlor*†	*N*-phenylimino diethylene bis(3,6-dichloro-2-methoxybenzoic acid)	
carbetamide*†‡	D-*N*-ethyl-2-(phenylcarbamoyloxy) propionamide	
chloramben*†‡	3-amino-2,5-dichlorobenzoic acid	
chloranocryl*‡	*N*-(3,4-dichlorophenyl) methacrylamide	(dicryl†)
chlorbromuron*†‡	*N'*-(4-bromo-3-chlorophenyl)-*N*-methoxy-*N*-methylurea	
chlorbufam*‡	1-methylprop-2-ynyl *N*-(3-chlorophenyl)carbamate	
chloreturon*	*N'*-(3-chloro-4-ethoxyphenyl)-*N,N*-dimethylurea	
chlorfenac*‡	2,3,6-trichlorophenylacetic acid	(fenac†)
chlorfenprop-methyl*‡	methyl 2-chloro-3-(4-chlorophenyl)propionate	
chlorflurecol*	2-chloro-9-hydroxyfluorene-9-carboxylic acid	(chlorflurenol‡)
chlorfluren*‡	2-chlorofluorene-9-carboxylic acid	
chloridazon*	5-amino-4-chloro-2-phenylpyridazin-3(2*H*)-one	(pyrazon†)
chlormequat*‡	2-chloroethyl-trimethyl-ammonium chloride	(CCC†)
chlornitrofen*‡	4-nitrophenyl 2,4,6-trichlorophenyl ether	
chloroxuron*†‡	*N*-4-(4-chlorophenoxy)phenyl-*N,N*-dimethylurea	
chlorphonium*‡	tributyl-2,4-dichlorobenzylphosphonium	
chlorpropham*†‡	isopropyl *N*-(3-chlorophenyl)carbamate	
chlorthal-dimethyl*‡	2,3,5,6-tetrachloroterephthalic acid dimethyl ester	(DCPA†)
chlorthiamid*‡	2,6-dichlorothiobenzamide	
chlortoluron*‡	*N'*-(3-chloro-4-methylphenyl)-*N,N*-dimethylurea	
cisanilide†	2,5-dimethyl-1-pyrrolidine-carboxanilide	
clofop-isobutyl*	isobutyl 2-[4-(4-chlorophenoxy)phenoxy] propionate	
cloprop*	2-(3-chlorophenoxy)propionic acid	
4-CPA*†‡	4-chlorophenoxyacetic acid	
cyanatryn*	4-(1-cyano-1-methylethylamino)-6-ethylamino-2-methylthio-1,3,5-triazine	
cyanazine*†‡	2-chloro-4-(1-cyano-1-methylethylamino)-6-ethylamino-1,3,5-triazine	
cycloate*†	*N'*-cyclohexyl-*N*-ethyl-*S*-ethyl(thiocarbamate)	
cycluron*†‡	*N'*-cyclo-octyl-*N,N*-dimethylurea	
cyometrinil*	α-(cyanomethoxyimino)benzacetonitrile	
cyperquat*†	1-methyl-4-phenylpyridinium	
cyprazine*†	2-chloro-4-cyclopropylamino-6-isopropylamino-1,3,5-triazine	
cyprazole*†	*N*-[5-(2-chloro-1,1-dimethylethyl)-1,3,4-thiadiazol-2-yl] cyclopropanecarboxamide	
cypromid*†‡	3,4-dichlorocyclopropanecarboxanilide	
2,4-D*†‡	2,4-dichlorophenoxyacetic acid	
dalapon*†	2,2-dichloropropionic acid	
daminozide*‡	*N*-dimethylaminosuccinamic acid	
dazomet*†‡	3,4,5,6-tetrahydro-3,5-dimethyl-1,3,5-thiadiazine-2-thione	
2,4-DB*†	4-(2,4-dichlorophenoxy)butyric acid	
DCU†	dichloral urea	
delachlor*†‡	α-chloro-*N*-(isobutoxymethyl)-2,6-acetoxylidide	
2,4-DES	2-(2,4-dichlorophenoxy)ethyl hydrogen sulphate	(sesone†, disul‡)
desmedipham*†‡	3-(ethoxycarbonylamino)phenyl *N*-phenyl-carbamate	
desmetryne*	4-isopropylamino-6-methylamino-2-methylthio-1,3,5-triazine	(desmetryn†‡)
di-allate*‡	*S*-2,3-dichloroallyl *N,N*-di-isopropyl(thiocarbamate)	(diallate†)
dicamba*†‡	3,6-dichloro-2-methoxybenzoic acid	
dichlobenil*†‡	2,6-dichlorobenzonitrile	
dichlone*†‡	2,3-dichloro-1,4-naphthaquinone	
dichlorflurenol*‡	2,7-dichloro-9-hydroxyfluorene-9-carboxylic acid	
dichlormate*†‡	3,4-dichlorobenzyl *N*-methylcarbamate	

ERRATA

(lines are counted from the beginning of the bibliographic data in each item.)

Volume 26

Page	*Abstract*	*Line*	
200	1839	4	For '115pp.' read '115'
204	1863	4	For '109pp.' read '109'

Volume 27

272	2497	1	For 'AMMON, H.V.' read 'AMMON, H.U.'
303	2801	1	For 'AMMON, H.V.' read 'AMMON, H.U.'
331	3074	1	For 'ABDEEV' read 'AVDEEV'
452	4221	17	For '...[5-chloro-4-trifluoromethylphenoxy]...' read '...[2-chloro-4-trifluoromethylphenoxy]...'

Volume 28

8	73	4	For 'Opogard (terbuthylazine)' read 'Opogard (terbutryne + terbuthylazine)'
64	628	18	For '[3-chloro-4-trifluoro...]' read '[2-chloro-4-trifluoro...]'
106	1024	11	Insert 'an average' after the word 'produces'
151	1437	1	For 'ANDERSON' read 'ANDERSEN'
187	1766	7	For '[MCPA + 2,4-D]' read '[mecoprop + MCPA + 2,4-D + picloram]'
207	1953	7	For 'Alsmataceae' read 'Alismataceae'
243	2254	20	For 'Benzoylprop' read 'Benzoylprop-ethyl'
302	2818	3	After '**chloroplasts.**]' insert the following '[Paper given at] Escarda Química en Cultivos Herbaceos Extensivos: VIII Jornada de Estudio de la Asociación Interprofesional para el Desarrollo Agrario, Saragossa 1976'
346	3250	6	For '*Orobanche cumana*' read '*Orobanche cernua*'
346	3250	8	For '*O. cumana*' read '*O. cernua*'
346	3250	10	For '*O. cumana*' read '*O. cernua*'
346	3250	13	For '*O. cumana*' read '*O. cernua*'
441	4136	3	For '(1979)' read '(1978)'